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PROBOSCIDEA SABULOSA (MARTYNIACEAE) IN SOUTH TEXAS

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ABSTRACT

Proboscidea sabulosa Correll, sand dunes devil's claw, is a native of west Texas, New Mexico, and northern Chihuahua. A specimen collected from Starr County in south Texas has recently been identified as *P. sabulosa*, representing a range extension of over 400 miles.

Key Words: *Proboscidea sabulosa*, Texas, Starr County

The genus *Proboscidea* consists of 7 species found primarily in arid and semiarid regions of North America. The center of diversity for the genus is west Texas, where 6 of the 7 species can be found. Only one species, *Proboscidea louisianica* (Mill.) Thell., was previously known from south Texas. A review of specimens for a forthcoming treatment of the family in the Flora of North America has uncovered the existence of a second species, *Proboscidea sabulosa* Correll, in south Texas. Specimens from the Starr County population do not appear to differ from specimens collected further west.

Voucher: **TEXAS**. Starr Co.: Hwy 1017, 0.9 mi W of La Gloria, 13 Aug 2005, *A. Richardson & K. King 3282* (RUNYON not seen, TEX-LL). Figure 1.

Proboscidea sabulosa, an edaphic endemic, has been previously collected in deep sand dunes of west Texas, southeastern and central New Mexico, and northern Mexico (Bretting 1981; Gutierrez 2012). The Starr County specimens represent a range extension of over 400 miles from the previously known distribution of *P. sabulosa*. These specimens were also collected in sandy substrates, specifically Sarita fine sand (USDA, NRCS 2012). A search for additional plants was conducted by the author in August of 2012, but the area had not received any significant rainfall at the time and no additional plants were located.

Some species of Martyniaceae, such as *Proboscidea louisianica*, *Proboscidea fragrans*, *Martynia annua*, and *Ibicella lutea*, have been introduced to other parts of the world as escaped ornamentals (Miller 1768; Van Eseltine 1929; Thieret 1977; Bretting 1984; Gibson 1999; Meyers-Rice 1999; Gutierrez 2007; Kennedy et al. 2010). It is unlikely that *P. sabulosa* was introduced into Starr County as an escaped ornamental, as it lacks the large, showy flowers present in other species and requires a very specific substrate for its growth. The most likely explanation for the presence of this species in Starr County is transport via the Rio Grande from populations along the upper Rio Grande and Pecos River.

The Starr County population appears to be quite small. Populations of *P. sabulosa* in other parts of its range also tend to be small, sometimes occurring as single individuals in drier seasons, so it is plausible that the Starr County population may be considered established, though very rare. Most of the range of this species consists of private land, which may contribute to the relatively few specimens in herbaria.

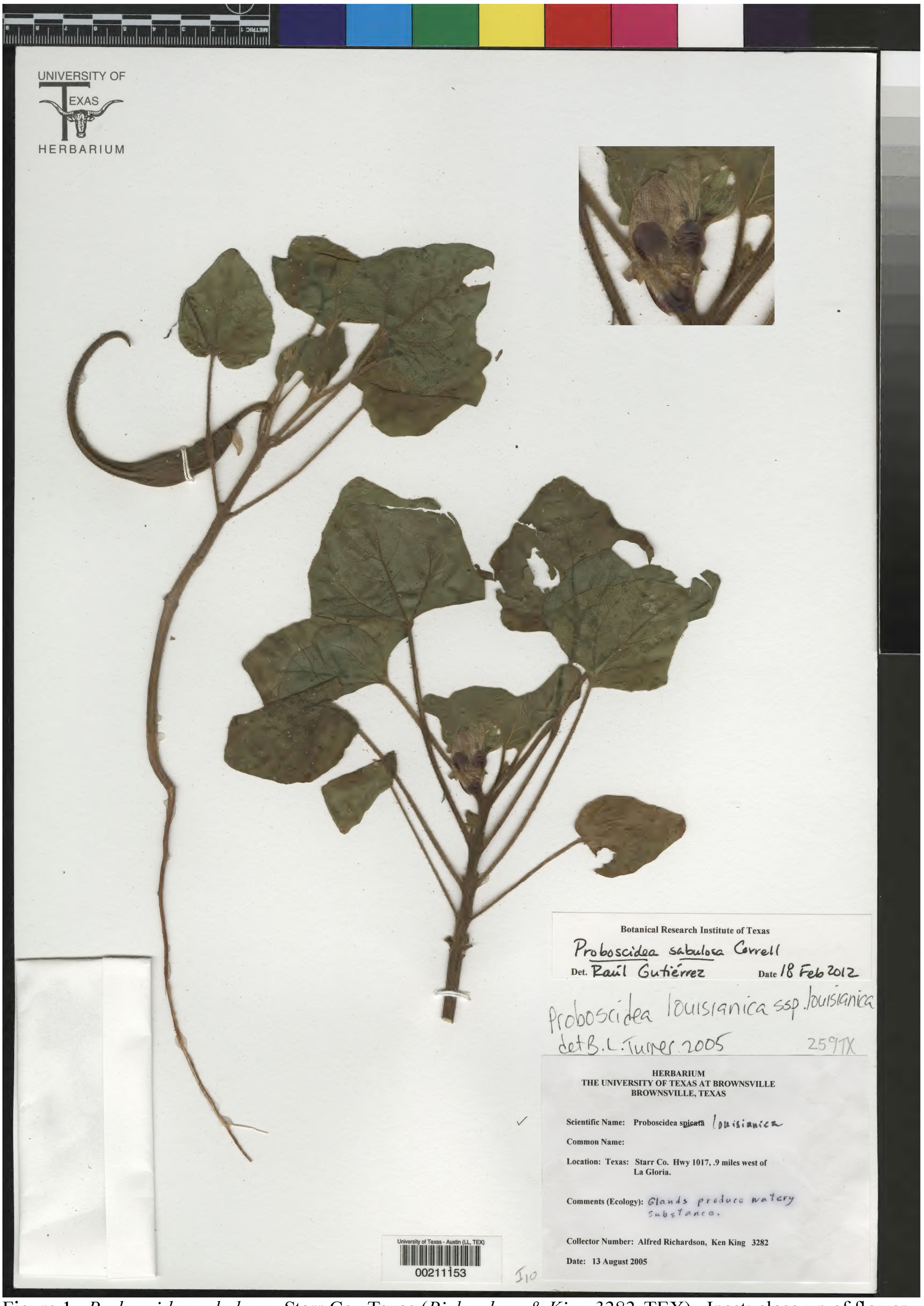
UNIVERSITY OF TEXAS HERBARIUM
Botanical Research Institute of Texas
Proboscidea sabulosa Correll
Det. Raúl Gutiérrez Date 18 Feb 2012
Proboscidea louisianica ssp. louisianica
det B.L. Turner 2005
25911X
HERBARIUM
THE UNIVERSITY OF TEXAS AT BROWNSVILLE
BROWNSVILLE, TEXAS
Scientific Name: Proboscidea spicata louisianica
Common Name:
Location: Texas: Starr Co. Hwy 1017, .9 miles west of La Gloria.
Comments (Ecology): Glands produce watery substance.
Collector Number: Alfred Richardson, Ken King 3282
Date: 13 August 2005
University of Texas - Austin (LL, TEX)
00211153

Figure 1. *Proboscidea sabulosa.* Starr Co., Texas (*Richardson & King 3282*, TEX). Inset: close-up of flower.

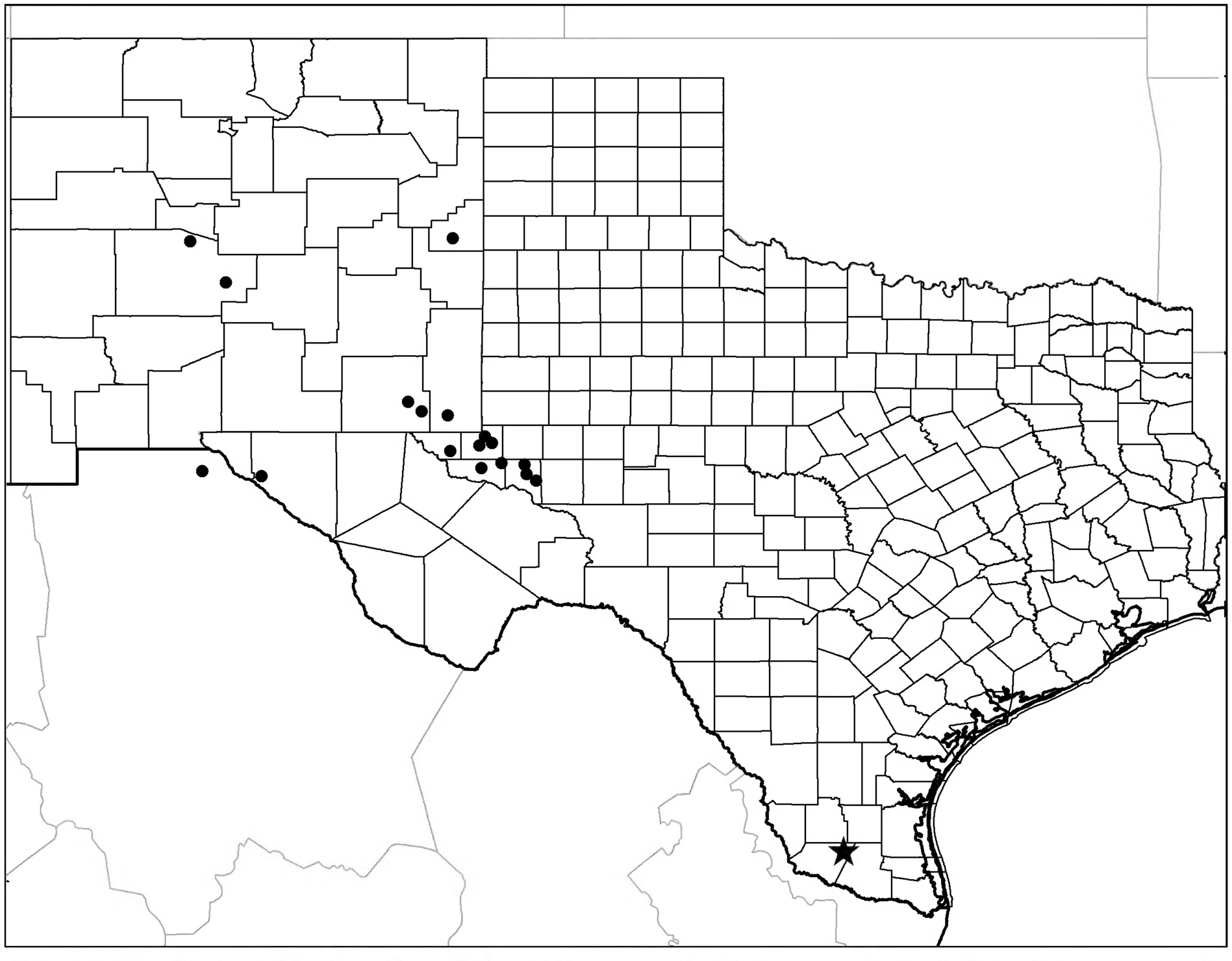

Figure 2. Distribution of *Proboscidea sabulosa*. The star marks disjunct population in Starr County, reported here.

KEY TO SOUTH TEXAS SPECIES OF *PROBOSCIDEA*

1. Inflorescences with 3–8 flowers; peduncles to 5 cm, surpassed by the foliage; sepals free for more than 75% of their length; corolla cream-colored on the inside with purple specks proximally, solid purplish-red distally, 15–25 mm long; seeds spindle-shaped, 14–17 mm long, more than three times as long as wide; habitat deep sands ..... **Proboscidea sabulosa**

1. Inflorescences with 20–30 flowers; peduncles to 70 cm, surpassing the foliage; sepals united for more than 25% of their length; corolla white to lavender, 25–40 mm long; seeds ovoid-rhomboid, 7–9 mm long, less than three times as long as wide; habitat various ..... **Proboscidea louisianica**

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